

## II. Executive Summary

### a. Project Title: Petaluma Marsh Expansion Project - Marin County

Applicants: Marin Audubon Society (MAS)

### b. Project Description and Primary Biological/Ecological Objectives

The project will acquire 181.46-acres of baylands west of the Petaluma River at the Marin-Sonoma border, restore 109.72 acres of diked marsh on the site to tidal marsh, and permanently protect the entire site in the ownership of the California Department of Fish and Game. 71.74 acres are already tidal marsh. The Marin Audubon Society will develop the restoration plan, acquire the site, implement the restoration plan, and then donate it to Department of Fish and Game. \$352,135 is requested for this proposal.

The primary ecological objective is to restore and permanently protect tidal marsh as part the 2,000 acre Petaluma Marsh, the largest undiked tidal marsh remaining in the Bay. The project will directly benefit Chinook salmon, Steelhead Trout, Longfin Smelt, Splittail, Green and White Sturgeon, and various special status species including the Black Rail, California Clapper Rail, Salt Marsh Yellowthroat, San Pablo Song Sparrow, and migratory shorebirds and waterfowl. Removing the levee also will restore the currently fragmented floodplain habitat and channel meanders. The project will provide increased and enriched foraging opportunities for fish and birds on-site and downstream, and will benefit the Petaluma River watershed.

### c. Approach/Tasks/Schedule

The project uses a collaborative partnership approach between state and federal agencies, a non-profit organization, and private industry, to reduce costs and facilitate the project. The present owner of the site, Redwood Landfill Inc. is willing to sell the 181 acres for the purpose of restoration and permanent protection.

The project design will be developed by PWA, consultants in hydrology. The principal on the project, Dr. Jeffrey Haltiner, has had extensive experience restoring marshes throughout the Bay and elsewhere in California. Biologists from the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and other wildlife agencies will also participate in development of the plan. The Marin Audubon Society will manage the project and the State Coastal Conservancy will accept the funds from Caltrans and oversee the project.

The tidal marsh restoration will be accomplished by removing the levee that was placed around the 109.72 acres in the 1960's. Reintroducing tidal waters will allow the site to restore to tidal marsh naturally. Tidal waters will enter the site and drop sediments which will raise the elevations sufficiently for marsh plain to restore itself. Sediment rates in this area are very high, and marsh vegetation will colonize naturally as sediments containing native plant seeds are deposited. Historic channel meanders will also reform naturally. Tidal marsh ponds will be restored and seasonal wetlands created. The plan will provide for protection of the existing railroad tracks.

The restoration plan will be completed by September 1998; acquisition will be accomplished by January 1999, and completion of construction by November 1999, after which the site will be donated to the Department of Fish and Game. Applications for regulatory agency permits have been made by Caltrans.

### d. Justification for Project and Funding by CALFED.

This project will address the high priority stressor: the lack of tidal wetlands. Over 82% of the historic tidal wetlands in the Bay-Delta have been lost to diking or filling.

The project will contribute to the CALFED vision of restoring large areas of wetlands to assist in the recovery of special status fish populations and to

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provide high quality aquatic habitat for other fish and wildlife that are dependent on the Bay-Delta. This is an opportunity that must be acted upon promptly or it could be lost. Should the landfill be sold or the management change, there could be renewed attempts to expand the landfill onto the site. Restoring and permanently protecting these resources is essential for the preservation and enhancement of the Bay and Delta system.

**e. Budget Costs and Third Party Impacts**

The total budget for the project is \$736,000. The California Department of Transportation (Caltrans) will provide \$486,635, for half of the design planning, acquisition, restoration as mitigation for an earthquake retrofit project on the Sonoma Creek bridge. MAS will seek the other half. In addition, Caltrans is also funding a hazardous material and cultural resources survey, appraisal and post-project monitoring. The Marin Audubon Society has obtained grants of \$25,000 from the U.S. Fish and Wildlife Service and \$1,000 from the State Coastal Conservancy. Marin Audubon will contribute \$22,000 of its own funds as well as administrative services and is seeking funding in the amount of \$352,135 from Calfed for the portion of the project not funded by Caltrans and other entities. The property owner is contributing aerial photographs and an appraisal. Funds are also being sought from other sources including the Marin Community Foundation and Wildlife Conservation Board.

The project will benefit the Department of Fish and Game's 2,000-acre Petaluma Marsh Wildlife Area and eliminate the potential for conflicting uses adjacent to the landfill and the marsh. The project design will ensure protection of the railroad line west of the site. There will be no adverse impacts to other adjacent property owners.

**f. Applicant Qualifications**

The Marin Audubon Society, under the direction of Barbara Salzman, has successfully completed four major marsh restoration/enhancement projects involving removal of fill and restoration of tidal marshes, as well as other smaller enhancement projects. A fifth enhancement project at an approximately 300 acre marsh in northern Marin County is expected to be completed this summer. The Marin Audubon Society has implemented these projects using grants and funding from many sources including the State Coastal Conservancy, Marin Community Foundation, and Administrative Civil Liability in-lieu of fine monies administered by the Regional Water Quality control Board.

**g. Monitoring and Data Evaluation**

A five-year Monitoring Program will measure at least the following: fish and bird use, sedimentation, channel formation, recolonization of vegetation.

**h. Local Support/Coordination with other Programs/Compatibility with CALFED Objectives**

Protection and restoration of the site is a high priority for the Marin County Board of Supervisors and the Marin County Open Space District. Many environmental organizations and agencies support the restoration and permanent protection of the site, as does the property owner. The project is also supported by the Sonoma Resource Conservation District which is developing a Watershed Plan for the Petaluma River and is supported by the San Francisco Estuary Project's Comprehensive Conservation and Management Plan.

The project complies with all applicable plans for the area. The Marin Countywide Plan contains policies supporting the protection and restoration of wetlands, migratory and special status species, and enhancing biodiversity. The solid waste plan does not show this site as part of the landfill.

The project will advance the CALFED objectives of restoring saline emergent tidal wetlands and seasonal wetlands for the support of fish and other wildlife species of concern.